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EXAMINER

PATEL, DHAIRYA A

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/018,864	<b>Applicant(s)</b> WALLENIOUS, JUKKA	
	<b>Examiner</b> Dhairya A. Patel	<b>Art Unit</b> 2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 31-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24,31-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is responsive to communication filed on 7/1/2009. This amendment has been fully entered and considered.
2. Claims 25-30 are cancelled and claim 40-41 are newly added claims. Therefore Claims 1-41 are subject to examination.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

***Claims 1-4,7-9,13-16,19-21,31-36, 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. U.S. Patent # 6,693,874 (hereinafter Shaffer1) in view of Hirni et al. U.S. Patent # 6,731,609 (hereinafter Hirni) further in view of Potter et al. U.S. Patent # 6,728,236 (hereinafter Potter)***

As per claim 1, Shaffer1 teaches a method comprising:

-monitoring at a router, a control signaling message transmitted between the two end-points (column 4 lines 38-44), the control signal message being component-specifically for one of: separate audio (Fig. 2a element 14, 212), video (Fig. 2a element 24,15) and data component streams (Fig. 2a element 40,19), the audio, video and data component streams each forming a separate media component (column 4 lines 38-49); of a plurality of separate media components of a multimedia stream transmitted

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between the two network end-points (column 4 lines 15-50); **NOTE:** The reference teaches establishing connection between two or more terminals and also formats transmitted video, audio, data signaling and control streams into messages for communication. In Fig. 2, it shows audio, video, data component streams being separate based on the appropriate audio, video and data interfaces.

-notifying a service control point (Fig. 2a element 18a, 18b) or (Fig. 1 element 102a, 102b) about the separate media components (column 4 lines 20-30);

**NOTE:** Shaffer1 teaches the control layers or redundancy supervisory layer which are known as control units (service control point) are standard H.323 control layers and thus include Q.931 layers and H.245 layers. The H.245 layers which is the media control protocol that allows capability exchange, opening and closing of logical channels and flow control messages. Examiner would like to point out that H.323 control layers include separate media components as known in the art.

-determining at the routing means that the separate media components are associated with a call between the two network end-points (column 4 lines 33-44)(column 5 lines 1-14, lines 53-64); and **NOTE:** The reference teaches client 1 initiating a call to client 2 it sends an H.225 setup message which includes audio, video and data components to its primary gatekeeper (routing means) along signaling path. The media channel is then established between two endpoints.

-applying, at in the router, a connection control issued by the service control point to the separate media components wherein the connection control enables (column 4 lines 38-49)(column 5 lines 53-64)

-modification of terminal capability information of the control signaling messages related to the separate media components (column 4 lines 38-44), and separate relaying of the component specific control signaling messages to a respective one of the separate media components related (column 4 lines 44-49) **NOTE:** The reference clearly states that H.225.0 layer retries the received video, audio, data signaling and control streams from messages that have been input from network interfaces, routes the signaling and control information to the appropriate control layer (routing the signaling messages), and routes media streams to the appropriate audio, video and data interfaces (respective one of the separate media components)

Hirni also teaches monitoring at a router a control signaling message transmitted between the network two end-points (Fig. 2b element 43 and 43'), the control signal message being component-specific for one of : separate audio (Fig. 14 element 320), video (Fig. 14 element 322) and data component streams (Fig. 14 element 318), the audio, video and data component streams each forming a separate media component (Fig. 13 element 320,322,318) of a plurality of media components of a multimedia stream transmitted between the two network endpoints (column 15 lines 9-14, 21-30, 41-59)

Hirni also teaches notifying, service control point about the separate media components (column 17 lines 1-5, lines 16-21, lines 31-45)

Hirni also teaches determining at the routing means that separate media components are associated with the call between the two network end points (column 16 lines 67-67)(column 17 lines 1-21)(column 18 lines 1-22); and

Hirni teaches applying at the router, a connection control issued by the service control point to the separate media components, wherein the connection control enables: modification of the control signaling messages (setup messages) related to the separate media components (column 14 lines 4-25)(Column 15 lines 9-20, lines 41-59)

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Hirni's teaching in Shaffer1's teaching to come up connection control enabling modification of control signaling messages related to media components. The motivation for doing so call control provides call setup and control for conferences in which call control coordinates activities among H.245, Q.931, media stream router and media player components for processing (column 14 lines 16-25) by mixing the audio and video streams, thereby synchronization of the audio and video for logical channel that are open (column 15 lines 51-60)

Although Shaffer1 teaches modification of the control signaling message related to separate media components, Shaffer1 does not teach modification of terminal capability information of the control signaling message.

Potter teaches modification of terminal capability information of the control signaling message (column 7 lines 13-29) related to separate media components (column 5 lines 49-61). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Potter's teaching in Shaffer1 and Hirni's teaching to come up with modification of the terminal capability information of the control signaling message. The motivation for doing so would be to notify the

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gatekeeper the correct capabilities of the terminal at endpoint therefore, the gatekeeper can send/forward the correct media components to the terminals (column 7 lines 22-25)

As per claim 2, Shaffer1, Hirni and Potter teaches the method of claim 1, but Shaffer1 further teaches wherein in the monitoring the component-specific control signaling message includes receiving, at call control means a media component control-signaling message (column 4 lines 38-45).

**NOTE:** The reference teaches having transmitted video, data, signal and control streams into messages and H.225 layer retrieves each video, audio, data signaling streams from messages and routes the signaling and control information.

As per claim 3, Shaffer1, Hirni and Potter teaches the method of claim 1, but Shaffer1 further teaches wherein the notifying the control comprises:

- sending a message to the service control point (column 5 lines 53-58) and

**NOTE:** The reference teaches sending a set up message through its gatekeeper gateway to the client 2, which comprises the service control point.

- waiting for a response from the service control point (Column 5 lines 59-61).

**NOTE:** The reference teaches in response to the H.225 set up message, the gatekeeper sends a H.225 set up message to the endpoint client 2 and client 2 responds along the signaling path the call set up.

As per claim 4, Shaffer1, Hirni and Potter teaches the method of claim 1, but Shaffer1 further teaches wherein notifying the service control point comprises:

- sending a message to the service control point (column 5 lines 53-58) and

**NOTE:** The reference teaches sending a set up message through its gatekeeper gateway to the client 2, which comprises the service control point.

-waiting for a response from the service control point (Column 5 lines 59-61).

**NOTE:** The reference teaches in response to the H.225 set up message, the gatekeeper sends a H.225 set up message to the endpoint client 2 and client 2 responds along the signaling path the call set up.

-receiving the message from the service control point (Column 5 lines 59-61)

**NOTE:** The reference teaches in response to the H.225 set up message, the gatekeeper sends a H.225 set up message to the endpoint client 2 and client 2 responds along the signaling path the call set up.

-sending a modified component control signaling message for call control means (column 4 lines 38-49)

As per claim 7, Shaffer1, Hirni and Potter teaches the method of claim 1, but Shaffer1 further teaches wherein notifying the control means comprises:

-sending a message from call control means point to the service control point (column 5 lines 60-67); and

-waiting for a response from the service control point to the call control means (Column 6 lines 1-10)

As per claim 8, Shaffer1 teaches the method of according to claim 2, wherein the media component control signaling message describes opening, closing or modifying a media component (column 4 lines 25-30).



**NOTE:** The reference teaches the control layers using standard H. 323 control layers and H.225 and H.245 control layers which is the media control protocol that allows opening, closing of logical channels, mode preference requests, flow control messages.

As per claim 9, Shaffer1 teaches the method according to claim 2, wherein the media component control signaling message is in association with a call signaling message (column 5 lines 1-7).

As per claim 13, Shaffer1 teaches a network system comprising:

-a service control point (Fig. 1 element 102a, 102b)(Fig. 2 element 18A & 18B) for providing media component control signaling messages transmitted between the two end-points for a multimedia call (column 4 lines 38-44), the control signaling being component-specifically for one of: separate audio (Fig. 2a element 14, 212), video (Fig. 2a element 24,15) and data component streams (Fig. 2a element 40,19), the audio, video and data component streams each forming a separate media component (column 4 lines 38-49); of a plurality of separate media components of a multimedia stream transmitted between the two network end-points (column 4 lines 15-50); **NOTE:** The reference teaches establishing connection between two or more terminals and also formats transmitted video, audio, data signaling and control streams into messages for communication. In Fig. 2, it shows audio, video, data component streams being separate based on the appropriate audio, video and data interfaces.

-the routing means for:

-notifying a service control point (Fig. 2a element 18a, 18b) or (Fig. 1 element 102a, 102b) about the separate media components (column 4 lines 20-30);

**NOTE:** Shaffer1 teaches the control layers or redundancy supervisory layer which are known as control units (service control point) are standard H.323 control layers and thus include Q.931 layers and H.245 layers. The H.245 layers which is the media control protocol that allows capability exchange, opening and closing of logical channels and flow control messages. Examiner would like to point out that H.323 control layers include separate media components as known in the art.

-determining at the routing means that the separate media components are associated with a call between the two network end-points (column 4 lines 33-44)(column 5 lines 1-14, lines 53-64); and **NOTE:** The reference teaches client 1 initiating a call to client 2 it sends an H.225 setup message which includes audio, video and data components to its primary gatekeeper (routing means) along signaling path. The media channel is then established between two endpoints.

-applying a connection control issued by the service control point to the separate media components wherein the connection control enables (column 4 lines 38-49)(column 5 lines 53-64)

-modification of terminal capability information of the control signaling messages related to the separate media components (column 4 lines 38-44), and separate relaying of the component specific control signaling messages to a respective one of the separate media components related (column 4 lines 44-49) **NOTE:** The reference clearly states that H.225.0 layer retries the received video, audio, data signaling and

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control streams from messages that have been input from network interfaces, routes the signaling and control information to the appropriate control layer (routing the signaling messages), and routes media streams to the appropriate audio, video and data interfaces (respective one of the separate media components)

Hirni also teaches monitoring at a router a control signaling message transmitted between the network two end-points (Fig. 2b element 43 and 43'), the control signal message being component-specific for one of : separate audio (Fig. 14 element 320), video (Fig. 14 element 322) and data component streams (Fig. 14 element 318), the audio, video and data component streams each forming a separate media component (Fig. 13 element 320,322,318) of a plurality of media components of a multimedia stream transmitted between the two network endpoints (column 15 lines 9-14, 21-30, 41-59)

Hirni also teaches notifying, service control point about the separate media components (column 17 lines 1-5, lines 16-21, lines 31-45)

Hirni also teaches determining at the routing means that separate media components are associated with the call between the two network end points (column 16 lines 67-67)(column 17 lines 1-21)(column 18 lines 1-22); and

Hirni teaches applying a connection control issued by the service control point to the separate media components, wherein the connection control enables: modification of the control signaling messages (setup messages) related to the separate media components (column 14 lines 4-25)(Column 15 lines 9-20, lines 41-59)

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Hirni's teaching in Shaffer1's teaching to come up connection control enabling modification of control signaling messages related to media components. The motivation for doing so call control provides call setup and control for conferences in which call control coordinates activities among H.245, Q.931, media stream router and media player components for processing (column 14 lines 16-25) by mixing the audio and video streams, thereby synchronization of the audio and video for logical channel that are open (column 15 lines 51-60)

Although Shaffer1 teaches modification of the control signaling message related to separate media components, Shaffer1 does not explicitly teach one or more detection points configured to report at least one of routing means and the service control point in response to a trigger and modification of terminal capability information of the control signaling message

Potter teaches one or more detection points configured to report at least one of routing means and the service control point in response to a trigger (column 7 lines 48-67)(column 8 lines 1-9) modification of terminal capability information of the control signaling message (column 7 lines 13-29) related to separate media components (column 5 lines 49-61). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Potter's teaching in Shaffer1 and Hirni's teaching to come up with modification of the terminal capability information of the control signaling message. The motivation for doing so would be to notify the

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gatekeeper the correct capabilities of the terminal at endpoint therefore, the gatekeeper can send/forward the correct media components to the terminals (column 7 lines 22-25)

As per claims 14-16,19-21 teaches same limitations as claims 2-4,7-9 respectively, therefore rejected under same basis.

As per claims 31,33,34,35 it teaches same limitations as claims 1,3,4,7 respectively, therefore rejected under same basis.

As per claim 32, Shaffer1 and Hirni teaches the apparatus of claim 31, but Shaffer1, further teaches wherein the router includes call control means and media proxy means (column 1 lines 66-67)(column 2 lines 1-10).

As per claim 36, Shaffer1, Hirni and Potter teaches the apparatus of claim 31, but Shaffer1 further teaches wherein the modification of the control signaling messages related to the separate media components includes modifying a logical channel description (column 4 lines 22-38)

As per claim 40, Shaffer1, Hirni and Potter teaches the network system of claim 13, but Potter further teaches wherein the one or more detection points are configured to report at least one of a logical channel opening message and logical channel closing message (column 7 lines 13-30).

As per claim 41, Shaffer1, Hirni and Potter teaches the method of claim 1, but Potter further teaches further comprising: intercepting, at the router (i.e. gatekeeper), a logical channel description for one or more of the separate media components (column 5 lines 45-65) and receiving at the router, a modified logical channel description from the service control point (column 7 lines 13-30).

***Claims 5-6,10-12,17-18,22-24,37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. U.S. Patent # 6,693,874 (hereinafter Shaffer1) in view of Hirni et al. U.S. Patent # 6,731,609 (hereinafter Hirni) further in view of Potter further in view of Salama et al. U.S. Patent # 6,584,093 (hereinafter Salama).***

As per claim 5, Shaffer1, Hirni and Potter teaches the method of claim 1, wherein during the monitoring, but fails to teach if the component-specific control signaling message are routed via media proxy means, the method further comprises: the call control means requesting report of media component related events from the media proxy means, and the media proxy means informing the call control means of the media component related events. Salama teaches if the specific control signaling message are routed via media proxy means, the method further comprises: the call control means requesting report of media component related events from the media proxy means, and the media proxy means informing the call control means of the media component related events (column 3 lines 1-15, lines 22-44) (column 5 lines 44-67) (column 6 lines 1-6). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Salama's teaching in Shaffer1, Hirni and Potter's teaching to come up with routing signaling message via proxy, call control means requesting report from the media proxy, and media proxy informing the call control means. The motivation doing so would have been to find out if the signaling message was received when it was routed through the proxy therefore call control means requesting report to find out if the signaling message was received correctly.

As per claim 6, Shaffer1, Hirni and Potter teaches the method according to claim 1, but fails to teach the multimedia stream is routed via media proxy means communicating with call control means. Salama teaches the multimedia stream is routed via media proxy means communicating with call control means (column 3 lines 22-44). Salama teaches that all the RTP stream (multimedia streams) are routed via proxy communicating with the gatekeepers and the terminal (call control). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Salama's teaching in Shaffer1, Hirni and Potter's teaching to come up with having multimedia stream being route via a media proxy communicating with call control means. The motivation for doing so would have been so that each ISP which has different policies and which are connected to proxies can forces all incoming H.323 calls to go through these proxies in order to enforce its specific policies on the calls (column 3 lines 47-51).

As per claim 10, Shaffer1, Hirni, Potter and Salama teaches the method according to claim 6, but Salama further teaches wherein determining that the separate media components are associated with the call is performed in the media proxy (column 5 lines 50-67)(column 6 lines 1-6). Salama teaches media components associated with the call are received by the proxies and creates the corresponding request to pass to redirect server using media stream. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Salama's teaching in Shaffer1, Hirni and Potter's teaching to come up with determining separate media

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components are performed in the proxies. The motivation for doing so would have been so that media stream would flow directly between the endpoints and through Internet.

As per claim 11, Shaffer1, Hirni, Potter and Salama teaches the method of claim 10, but Shaffer1 further teaches further comprising: issuing a connection control requests from the service control point to the call control means (column 5 lines 60-67). Shaffer1 fails to teach issuing the connection control requests from the call control means to the media proxy means. Salama teaches issuing the connection control requests from the call control means to the media proxy means (column 5 lines 50-67)(column 6 lines 1-6) and switching the separate media components by the media proxy means in accordance with the connection control requests (column 6 lines 6-16). It would have been obvious to one ordinary skill in the art at the time of applicant's invention was made to implement Salama's teaching in Shaffer1, Hirni and Potter's teaching to come up with issuing connection control requests to the media proxy from the call control means. The motivation for doing so would have been so that the media stream would flow directly between the endpoints and through Internet.

As per claim 12, Shaffer1, Hirni, Potter and Salama teaches the method according to claim 11, but Shaffer1 further teaches wherein the switching of the separate media components includes switching IP packet payloads carrying a one of the separate media component between an incoming packet stream and an outgoing packet stream (column 5 lines 59-67) (column 6 lines 1-3, lines 44-47)

As per claims 17-18,22-24 teaches same limitations as claims 5-6,10-12 respectively, therefore rejected under same basis.



As per claim 37, Salama teaches the method of claim 5, further teaches wherein reporting the media component related events is performed by one or more detection points based on the specified trigger criteria. (Column 20 lines 5-11) **NOTE:** The reference teaches changes in the network configuration will result in an update message being sent into the network indicating certain paths are no longer valid. Receipt of the update message triggers the running of the route selection.

As per claim 38, Salama teaches the method of claim 37, wherein the specified trigger criteria includes a message type (column 20 lines 5-8). **NOTE:** The reference teaches sending an update message (message type).

As per claim 39, Salama teaches the method of claim 38, wherein the specified trigger criteria include a message origin (column 20 lines 5-11).

### ***Remarks***

Applicant's arguments with respect to claims 1-24,31-41 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A). "Method and Apparatus for automatic inter-domain routing of calls" by Salama et al. U.S. Patent # 6,584,093.

B). "System and method for distributed call signaling in telephony-over-LAN networks" by Shaffer et al. U.S. Patent # 6,801,521.

4.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dhairya A. Patel whose telephone number is 571-272-5809. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, first Fridays OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DAP

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2451